

Notice of Allowability

Application No.

10/039,887

Examiner

Aaron Roane

Applicant(s)

WOODARD ET AL.

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/24/2004.
2. ☒ The allowed claim(s) is/are 1,3,4,7,9-11 and 20.
3. ☒ The drawings filed on 15 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted: Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 200407291.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Albert C. Smith (Reg. No. 20,355) on 7/16/2004.

The application has been amended as follows:

Claims 2, 5, 6, 8, 12-19 and 21-25 are cancelled.

Claim 1 is rewritten as follows:

A catheter system for ablating biological tissue at a target tissue site, comprising:
an elongated body member having a proximal end and a flexible tubular distal portion and having at least one straight lumen passing therethrough; a handle portion operably attached to the proximal end of the elongated body member; an ablation device disposed in the flexible tubular distal portion of the body member and including at least one ablation element adapted to emit ablative energy therefrom; and a pull wire slidably disposed within said at least one lumen and

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slidably attached to the inner wall of said at least one lumen near the proximal end at a first angular position with respect to the longitudinal axis of the elongated body member and fixedly attached to the inner wall of said at least one lumen near the distal end of the flexible tubular distal portion at a second different angular position with respect to the longitudinal axis of the elongated body member for deflecting the flexible tubular distal portion in response to tension on the pull wire to position the ablation device in the deflected flexible tubular distal portion proximate and parallel to a surface of the target tissue site for effecting tissue ablation.

Claim 3 is rewritten as follows:

The catheter system of claim 1 in which the pull wire is fixedly attached to the elongated body member at the second position spaced a distance from the first position that provides enhanced mechanical advantage for deflecting the distal portion.

Claim 4 is rewritten as follows:

The catheter system of claim 3 wherein the pull wire is fixedly attached to the elongated body member at the second position at an angular orientation of about 180° with respect to the angular orientation of the first position.

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Claim 7 is rewritten as follows:

The catheter system of claim 1 in which a portion of the elongated body member proximal to the distal portion is resilient to restore the distal portion of the elongated body member to a predetermined position in response to removal of tension on the pull wire.

Claim 9 is rewritten as follows:

The catheter system of claim 1 further comprising a deflectable member having a cross-sectional geometry adapted to limit deflection to substantially one geometric plane.

Claim 10 is rewritten as follows:

The catheter system of claim 9, wherein the cross-sectional is rectangular.

Claim 11 is rewritten as follows:

The catheter system of claim 9, wherein the cross-sectional is circular.

Claim 20 is rewritten as follows:

The catheter system of claim 1 in which the pull wire is disposed substantially parallel to a longitudinal axis of the elongated body member for minimizing abrasive wear.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The prior art does not disclose, imply, suggest and/or teach or provide a properly motivated combination thereof disclosing a steerable/deflectable catheter having a straight lumen in which a pull wire is slidably disposed and attached (slidably or fixedly) at the proximal end at a first angular position on the inner wall of the lumen and at the distal end another second angular position on the inner wall of the lumen wherein the first and second angular positions are different.

It should be noted that Chen et al. (USPN 5,782,828) discloses an ablation catheter having at least one lumen wherein a pull wire is slidably disposed with a fixedly attached point at a distal location at first angular position and a slidably attached point at a proximal location at a second angular position 180° with respect to the first angular position. The distinction between the present invention and the Chen et al. reference is that the Chen et al. reference does not disclose that both attachment points are located on the inner wall of the at least one lumen.

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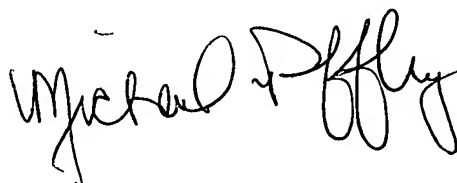
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Roane whose telephone number is (703) 305-7377. The examiner can normally be reached on 9am - 5pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (703) 308-0994. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.R. A.R.
August 9, 2004



**MICHAEL PEFFLEY
PRIMARY EXAMINER**